

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

River des Peres

Water Body Segment at a Glance:

Counties: St. Louis and St. Louis City
Nearby City : St. Louis
Water Body ID: 1710 (2.6 miles)
Pollutants: Chloride
E. coli bacteria
Low dissolved oxygen
Water Body ID: 3960¹ (6.5 miles)
Pollutant: Chloride
Source: Urban runoff/Storm sewers



Statewide Map Showing Location of Watershed

Scheduled for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. River des Peres is impaired due to exceedances of state water quality criteria that protect aquatic life and recreational designated uses.

Designated uses of River des Peres*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)²
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)
- Livestock and Wildlife Watering

¹ This segment of River des Peres appears on the approved 2014 303(d) List as being water body ID 3972. Previous listings referred to this segment as water body ID 1711U-01.

² The whole body contact recreational use was removed from water body 1710 of River des Peres in Missouri's Water Quality Standards. However, the U.S. Environmental Protection Agency has disapproved the removal of this use.

* In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Designated Uses that are Impaired

- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Warm Water Habitat (WWH)

Criteria that apply

- Numeric bacteria criteria for the protection of recreational uses are found in 10 CSR 20-7.031(5)(C) and Table A. For category B waters, *E. coli* counts, measured as a geometric mean, shall not exceed 206 counts/100mL of water “during the recreational season.” The state's recreational season is defined in this section of the rule as being from April 1 to October 31. For secondary contact recreation, the geometric mean shall not exceed 1,134 counts/100mL during the recreational season.

A stream is judged as impaired by bacteria if the water quality criteria are exceeded in any of the last three years for which there is adequate data (minimum of five samples taken during the recreational season. For water body 1710 of River des Peres, there was adequate data in 2009, 2010, and 2011. The secondary contact recreational use criterion was exceeded in 2011. The whole body contact recreation category B use was exceeded in all three years (Table 1).

Table 1. Recreational season *E. coli* data for River des Peres

<i>Year</i>	<i>WBC-B criterion (counts/100mL)</i>	<i>SCR criterion (counts/100mL)</i>	<i>Geometric Mean (counts/100mL)</i>
2009	126	206	211
2010	126	206	211
2011	126	206	1,195

- For the protection of aquatic life, a minimum criterion of 5mg/L is established in the state Water Quality Standards at 10 CSR 20-7.031 Table A. A stream is determined to be impaired by low dissolved oxygen if more than 10 percent of available dissolved oxygen measurements fall below this minimum criterion and if certain statistical error rate thresholds are met. For water body 1710 of River des Peres, 17 of 116 (15 percent) dissolved oxygen measurements were less than 5 mg/L (Figure 1).
- Numeric criteria for chloride are found in 10 CSR 20-7.031 Table A and are dependent upon water hardness and sulfate concentrations. However, this criteria was disapproved by the U.S. Environmental Protection Agency. For this reason, the assessment of River des Peres as impaired is based on the state's former EPA-approved chronic chloride criterion of 230 mg/L.

A stream is judged to be impaired by chloride if more than one exceedance of the criterion occurs in the most recent three years of available data during stable hydrologic periods. In River des Peres, there were six instances of exceedance within the last three years of available data. Of these six, two exceedances occurred during stable flow conditions.

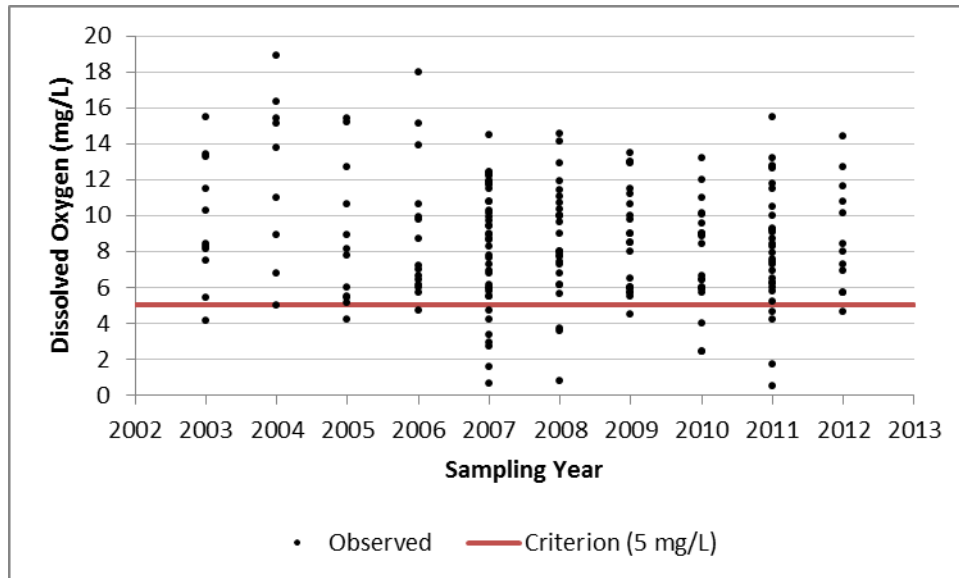


Figure 1. Dissolved oxygen data for water body 1710 of River des Peres

TMDLs for River des Peres

TMDLs developed for the River des Peres will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. TMDLs will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the River des Peres TMDLs will use the most current and available data. For this reason, final TMDLs may present information that differs from that contained in this information sheet.

For more information call or write:

Department of Natural Resources
 Water Protection Program – Watershed Protection Section
 P.O. Box 176
 Jefferson City, MO 65102-0176
 Ph: 1-800-361-4827 or 573-751-1300
 Fax: 573-526-6802
 Email: TMDL@dnr.mo.gov
 Program Home Page: dnr.mo.gov/env/wpp/index.html

Map showing the River des Peres Watershed

